Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Original) A method of generating a molecule-function network comprising a step of a connect search using a database which stores information on biomolecules hierarchized by one or more items including items selected from f group consisting of modification state, active or inactive state, complexation state, and structural change.
- 2. (Original) A method of generating a molecule-function network comprising a step of a connect search using a biomolecule-linkage database wherein information on a biomolecule pair comprises a condition with which the biomolecule pair is formed.
- 3. (Original) A method of generating a molecule-function network comprising a step of a connect search using a pathology-linkage database which stores information on a disease as a grouped and/or hierarchized data item and stores information on correlation between the data items.

- 4. (Original) A method of generating a molecule-function network using a biomolecule-linkage database, comprising a step of a connect search wherein biomolecule pairs are filtered by setting a condition to one or more data items including data items selected from a group consisting of a relation code, a relation-function code, a reliability code, an acting organ and directionality of a biomolecular pair.
- 5. (Currently Amended) The method of <u>claim 1</u> any one of claims 1 to 4 further comprising a step of scoring the molecule-function network generated by a connect search using a biomolecule-linkage database, based on one or more data items including data items selected from a group consisting of a relation code, a relation-function code, a reliability code, an acting organ and directionality of a biomolecular pair.
- 6. (Currently Amended) A method of analyzing a disease-related gene using the method of claim 1 any one of claims 1 to 5.
- 7. (Currently Amended) A method of analyzing a relation between two or more diseases using the method of claim 1 any one of claims 1 to 5.
- 8. (Currently Amended) A method of presuming a mechanism of action and/or a side effect of a drug molecule by preparing a drug molecule information

database and/or a drug molecule-biomolecule linkage database using the method of claim 1 any one of claims 1 to 5.

- 9. (New) The method of claim 2 further comprising a step of scoring the molecule-function network generated by a connect search using a biomolecule-linkage database, based on one or more data items including data items selected from a group consisting of a relation code, a relation-function code, a reliability code, an acting organ and directionality of a biomolecular pair.
- 10. (New) The method of claim 3 further comprising a step of scoring the molecule-function network generated by a connect search using a biomolecule-linkage database, based on one or more data items including data items selected from a group consisting of a relation code, a relation-function code, a reliability code, an acting organ and directionality of a biomolecular pair.
- 11. (New) The method of claim 4 further comprising a step of scoring the molecule-function network generated by a connect search using a biomolecule-linkage database, based on one or more data items including data items selected from a group consisting of a relation code, a relation-function code, a reliability code, an acting organ and directionality of a biomolecular pair.

- 12. (New) A method of analyzing a disease-related gene using the method of claim 2.
- 13. (New) A method of analyzing a disease-related gene using the method of claim 3.
- 14. (New) A method of analyzing a disease-related gene using the method of claim 4.
- 15. (New) A method of analyzing a relation between two or more diseases using the method of claim 2.
- 16. (New) A method of analyzing a relation between two or more diseases using the method of claim 3.
- 17. (New) A method of analyzing a relation between two or more diseases using the method of claim 4.
- 18. (New) A method of presuming a mechanism of action and/or a side effect of a drug molecule by preparing a drug molecule information database and/or a drug molecule-biomolecule linkage database using the method of claim 2.

- 19. (New) A method of presuming a mechanism of action and/or a side effect of a drug molecule by preparing a drug molecule information database and/or a drug molecule-biomolecule linkage database using the method of claim 3.
- 20. (New) A method of presuming a mechanism of action and/or a side effect of a drug molecule by preparing a drug molecule information database and/or a drug molecule-biomolecule linkage database using the method of claim 4.